EPICYCLIC GEAR EXERCISE DEVICE

Abstract of the Disclosure

An improved elliptical path exercise machine is provided that is simple and robust in its construction, requires minimal maintenance, provides smooth even exercise motion, and which has a compact foot-print. The apparatus includes a pair of planetary gears, sun/ring gears and at least one crank. The crank is supported and arranged so as to be rotatable about a crank axis. Each planetary gear is pivotably secured to the crank about a pivot point located and arranged such that as the crank is rotated the planetary gears engage and rotate relative to their corresponding sun/ring gears while simultaneously revolving about the crank axis so as to form right and left epicylic gear trains. Two foot pedals are each pivotably secured to a corresponding one of the planetary gears and are sized and arranged to support the feet of a user. The layout and geometries of the device are such that each foot-pedal follows a substantially elliptical foot-path as the crank is rotated. The major axis of the elliptical foot-path is greater than twice the effective crank-arm length of the crank so that a compact foot print is attained.

H:\DOCS\RJR\RJR-8841.DOC://rc1
112103
[JAB-8359:cp,df,jb:120498]